

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for recovering data lost due a power instability occurring during a write operation ~~performing write journal storage on a bus interface controller~~, comprising:

a data disk;

a bus interface controller;

a write journal memory on the bus interface controller; and

an external power source for providing power to the write journal memory, the external power source being located externally with respect to the bus interface controller,

wherein, the write journal memory maintains a log of write operations to the data disk,

wherein, the log of write operations is used to recover write operations interrupted by a power instability for reissue;

wherein, following reissue of the recovered write operations, the log entry for the recovered write operations are transferred to a storage device.

2. (Original) The system of Claim 1, wherein the bus interface controller is a Small Computer System Interface (SCSI) controller board.

3. (Original) The system of Claim 2, wherein the write journal memory is a random access memory (RAM).

4. (Original) The system of Claim 3, wherein the external power source is a battery.

5. (Original) The system of Claim 3, wherein the external power source includes an electrolytic capacitor.
6. (Original) The system of Claim 3, wherein the external power source is provided from an alternating current to direct current (AC to DC) converter
7. (Original) The system of Claim 6 wherein power to the AC to DC converter is provided through a 110 volt, 60 Hertz alternating current power source.
8. (Currently Amended) The system of Claim 1, wherein the ~~internal~~ write journal memory is part of a bus interface controller integrated circuit chip located on the bus interface controller.
9. (Original) The system of Claim 1, wherein the bus interface controller is a printed circuit board that has a bus interface controller integrated circuit chip and an internal memory chip.
10. (Currently Amended) The system of Claim 4, wherein the battery supplies power to the ~~internal~~ write journal memory only when bus interface controller power is turned off.
11. (Currently Amended) The system of Claim 4, wherein the battery supplies power to the ~~internal~~ write journal memory only when there is valid write journal memory and bus interface controller power is off.

12. (Currently Amended) A method for ~~maintaining a write journal in an operating state, recovering data lost due a power instability during a write operation~~ comprising:
logging write information to a real data disk and to a redundant data information disk in a memory internal to a bus interface controller unit; ~~and~~
~~if power is shut off to the bus interface controller unit,~~ providing power to the internal memory through an external power source;
recovering write operations interrupted by the power instability using the log of write operations stored in the memory;
reissuing the interrupted write operations; and
transferring the log entries for the recovered write operations to a storage device.
13. (Original) The method of Claim 12, wherein logging write information includes recording completed and incomplete write operations to the real data disk and the redundant data information disk in the internal memory.
14. (Original) The method of Claim 12, wherein logging write information includes recording completed write operations to the read data disk and the redundant data information disk in the internal memory.
15. (Original) The method of Claim 12, wherein logging write information includes recording incomplete write operations to the read data disk and the redundant data information disk in the internal memory.
16. (Original) The method of Claim 12, further comprising deleting logged write information from the internal memory when all writes complete.
17. (Currently Amended) The method of Claim 12, further comprising ~~determining a power fault condition~~ detecting when the power to the bus interface controller unit becomes unstable;

18. (Currently Amended) The method of Claim 17, further comprising, ~~if a power fault conditioned is determined, then~~ waiting for power restoration before recovering the interrupted write operations.

19. (Currently Amended) The method of Claim 18, ~~further comprising, if power is restored after a power fault condition, then~~ wherein the step of recovering comprises determining if entries remain in the write journal following restoration of power after a power instability.

20. (Currently Amended) The method of Claim 19, wherein the step of recovering further comprising comprises processing any incomplete write operations[[,]] if entries are determined to remain in the write journal, ~~processing any incomplete commands.~~

21. (Currently Amended) A system for maintaining a write journal on a bus interface controller board, comprising:

means for controlling a bus interface located on a bus interface controller board;
means for logging a write journal of write activity for a storage device, the means
for logging a write journal being located on the bus interface controller
board; and
means for supplying power to the means for logging a write journal, the means for
supplying power being external to the bus interface controller board;
means for recovering write operations interrupted by a system power instability
using the log of write operations stored in the write journal; and
means for transferring the log entries for the recovered write operations to a
storage device following recovery of the interrupted write operations.

22. (Original) The system of Claim 21, wherein the means for controlling a bus interface controls a Small Computer System Interface (SCSI).

23. (Original) The system of Claim 21, wherein the means for controlling a bus interface controls a Peripheral Component Interconnect (PCI) interface.

24. (Original) The system of Claim 21, wherein the storage device is a disk drive.

25. (Original) The system of Claim 21, wherein the storage device is a Redundant Array of Independent Disks (RAID).